



## **APPENDICES FOR “EFFECTIVE USE OF CAs AND TFs”**

### **Table of Contents:**

Appendix A: CA/TF Training, Fall, 2010 .....	pg. 1
Appendix B: Duties of CAs, TFs and FAs .....	pg. 2
Appendix C: Web Postings.....	pg. 3
Appendix D: In-Class Data Collection.....	pg. 4
Appendix E: Office Hour Interactions.....	pg. 5
Appendix F: Grading By CAs and TFs.....	pg. 6
Appendix G: Institutional Supports For Students .....	pg. 7

### **Appendix A: CA / TF Training, Fall 2010**

#### **SESSION #1:**

#### **Nuts and Bolts (Mandatory)**

*Tuesday, August 31<sup>st</sup> from 4 to 6 pm*

General responsibilities, hiring and payroll, rules of conduct, students in distress, Course Materials Office basics, Media Services basics, HKS course pages

#### **SESSION #2:**

#### **1) How To Be Effective CAs and TFs (Mandatory)**

*4 to 5 pm; Nye A, B, and C (5<sup>th</sup> floor of Taubman)*

- How learning theory informs successful support of students
- How to lead effective office hours and on-line help sessions
- How to create reasonable boundaries between your role as a CA/TF and the other roles that you play at HKS

#### **2a) Classroom Teaching Tips (Mandatory for TFs, optional for CAs)**

*5 to 6 pm; Nye A, B, and C (5<sup>th</sup> floor of Taubman)*

- How to create a productive classroom culture
- How to prepare for class
- How to incorporate active learning
- How to check for student understanding
- How to use the board / overhead / document camera / PowerPoint effectively

#### **2b) Managing Technology In The Classroom (Optional for CAs)**

*5:10 to 5:40 pm; Malkin Penthouse*

- Basic use of classroom AV and most common forms of trouble shooting
- How to support your professor’s use of “clickers” and tablet PCs, two of the Kennedy School’s most popular classroom technologies
- Q&A session, asking about the specific situation of your class and your classroom

## **Appendix B: Duties of CAs, TFs, and FAs**

The descriptions below are taken from the “Course Assistant and Teaching Fellows” page on the HKS website. This page contains a lot of valuable information about effectively using CAs and TFs. (<http://www.hks.harvard.edu/degrees/teaching-courses/catf>)

### **“Duties of Course Assistants**

In addition to attending the class, CAs may expect to do anything from preparing materials for class to holding “office hours” for one-on-one tutoring, reviewing problem sets, doing “first reads” on written assignments, arranging for media services in the classroom and maintaining the intranet Course Web Page. Exactly what any individual CA does depends on the course, the student’s abilities, and the needs of the faculty member. In addition to the normal work during the semester, CAs are also responsible for proctoring the final examinations. (Additional note: HKS CAs are expected to work approximately 10 hours a week, including the time needed to attend classes.)

### **Duties of Teaching Fellows**

In addition to attending the class, the TFs’ primary responsibility is to run formally scheduled review sessions. The meaning of “course sections” is different at HKS than at other schools within Harvard. TFs are not assigned to small sub “sections” of 10-15 students for a course like they are at the Faculty of Arts and Sciences (FAS). Instead, the HKS review session accommodates all students from the class who care to attend. Depending on the size of the class and the number of other TFs or CAs, TFs may also expect to prepare course materials, manage the CA team, hold “office hours” for one-on-one tutoring, review problem sets, and do “first reads” on papers. Exactly what any individual TF does is dependent on the course, his or her abilities, and the needs of the faculty member. While TFs may assist faculty by grading problem sets or other materials where the faculty provides an answer sheet, or may perform “first reads” on written work, TFs do not assign grades to students. Faculty are solely responsible for assigning students’ grades in HKS courses. In addition to the normal work during the semester, TFs are responsible for proctoring the final examinations. HKS TFs are expected to work approximately 15 hours per week.”

### **CAs, TFs and Faculty Assistants**

Frequently confusion arises about the difference in responsibilities of the CAs, TFs and the Faculty Staff Assistants. Staff assistants prepare course materials (including course packets and handouts), and maintain records of exam and final grades. CAs, TFs and Staff Assistants share the tasks of communicating with students by email or the course web page. It is the responsibility of the instructor to ensure that all concerned understand who is responsible for what.

Note that because CA and TF responsibilities begin on the first day of class and not before, faculty should not rely on them to prepare course materials.”

## **Appendix C: Web Postings**

Web postings can be a useful tool for you to improve the quality of your class sessions. Here are some details about how web postings work, how your CAs / TFs can help facilitate the process, and some costs and benefits of this strategy:

- You can have your students post their responses to questions regarding the reading and / or a previous class. One of the main goals of these posts is to help students and the teaching team better assess the general level of student understanding. To this end, it is good to have the questions focus on higher-order thinking skills, and it is often useful to have them due the night before class begins. The teaching team can then use these responses to help them plan for an effective class session. The rigor and detail of these questions need to be balanced with sensitivity to the workload you are asking students to do on any given night.
- Types of questions:
  - Ask students to synthesize different parts of the night's readings
  - Ask students to relate the readings to previous work in the course
  - Ask students to analyze the strengths of an argument
  - Ask students somehow to apply the concepts to their professional interests
  - Ask students to evaluate their understanding of a given reading
  - Ask students to briefly explain what they found most confusing, and why
- A few example questions (used by Professors Dan Levy in his API-202 course in Spring, 2010):
  - "Section 6.3 (equations 6.11 and 6.12) presents two different SRFs relating Test Scores with Student-Teacher Ratio (STR). Explain why the coefficient on the variable STR is different in the two equations. Include an explanation for your stats professor and one for a policymaker who is intelligent but not well-versed in statistics."
  - "Take the viewpoint that the study provides conclusive evidence of discrimination in the mortgage market. Select one weakness or criticism of the study (as discussed by the authors themselves, the textbook, or Longhofer and Peters in the Cato Institute article) and in your own words explain why it is not enough to refute the conclusions reached by Munnell, Tootell, Browne, and McEneaney."
  - "Think about a relationship of interest to you that involves a dummy variable as an explanatory variable." The question then goes on to ask students to identify how various statistical concepts show up in this example of interest, and to assess whether some statistical relationship they have been studying would likely hold in their chosen example.
  - "Please tell us what you found difficult or confusing in this reading assignment. If you did not find anything difficult or confusing, tell us what you found most interesting [Suggested length: 1 paragraph]."
    - They asked this question every time they did web posts.
- These responses can be managed in such a way that students can see each other's posts or not. If posts are made public (which has the value of students being able to learn from other students), it is best to frame the questions in such a way that a student could not post an adequate answer by ignoring the reading assignment and just looking at the posts of a few classmates.
- The CAs / TF can read these responses and either:
  - Provide for you a summary

- Select the most noteworthy for you to read / ask the respondents about in class
- Present the findings to the class themselves

Based on the educational literature, there are multiple costs and benefits of this teaching strategy:

Benefits:

- Likely to significantly increase the amount of reading happening outside of class
- Likely to increase the quality of reading
- Helps students better know what they know, know what they need to learn, and know effective ways to gain that knowledge (formally called “metacognition”)
- Helps the teaching team better know what students know, and then hone the lesson plan (and course assignments) accordingly

Costs:

- Time-consuming for students, and thus might displace some other work they might have otherwise done for the class (such as time spent on assignments or studying for exams)
- Time-consuming for the teaching team, and thus might stretch your resources and people too thin

Two potential ways to reap many of the benefits while reducing the costs would be...

- ...to ask for posts only for specific readings on a limited number of homework assignments, perhaps for the readings that the teaching team considers most important or the ones they think will be most confusing.
- ...on any given night to ask only some fraction of the class to answer the web posts. (The students who need to complete the posts would rotate on some schedule. And perhaps you could give a small amount of extra credit to those who posted voluntarily.) This method would reduce the burden on both students and the teaching team, but the teaching team still gets a representative sample of data that can help them better prepare for class.

## **Appendix D: In-Class Data Collection**

When you are leading a class, there are so many things that you are trying to keep track of: the content, the pacing, the understanding of each student, the energy and attitude in the room, etc. Even masterful instructors can't observe and know all relevant things that are going on in the classroom. As such, CAs and TFs can collect data on aspects of a class session, and then have a conversation with the faculty member focused around the data. Lee Warren, an expert in these types of data-driven observations and conversations, is also happy to go through this type of process with you.

Useful data can be quantitative:

- Amount of time teacher talks versus the amount of time students talk
- How the class time is spent (lecturing vs group work vs individual work, etc)
- How much silence do you allow for when you ask questions

- Patterns of student participation (left vs right side of the room, women vs men, US students vs international, young vs more experienced, etc)
- How many questions of a certain type are being asked (lower-order thinking, like recall and comprehension, vs higher-order thinking, like synthesis and analysis); perhaps even recording questions verbatim
- Where you physically are in the classroom throughout the session

Useful data also can be qualitative:

- Making note of your pacing throughout the class
- Making note of aspects that might have confused the students, either by observing students around them or by simply noting what seemed unclear
- Making note of your board work
- Making note of classroom culture, such as if some people seem uncomfortable participating or uncomfortable with particular topics of conversation

### **Appendix E: Office Hour Interactions**

Providing students with the proper assistance during office hours is a very challenging task. There are two main questions that the teaching team has to wrestle with when they are trying to assist students on assignments that are going to be graded:

1. What are the best ways to facilitate meaningful student learning?
2. What assistance is “fair”, such that the student is considered to have still earned the grade they end up receiving?

There are no perfect answers to either of these questions. But here are some things that should be useful to consider in terms of the guidance you give your CAs and TFs regarding how to conduct office hours. The process below applies most directly to quantitative problem sets, but most of the actions and thinking can apply in a similar fashion to qualitative office hour assistance, such as helping students craft more thoughtful response papers.

There is now a near-unanimous consensus of the learning sciences community (an interdisciplinary field combining education, psychology, philosophy, sociology, and a variety of natural science disciplines) that people learn by actively constructing their own understanding. This fundamental principle suggests that:

- Step #1 – CAs / TFs should work on asking questions that get students to talk about their current thinking on the topic at hand.
- Step #2 – CAs / TFs should either directly validate the parts of student thinking that are correct and point out the flawed thinking, or require that the student try to figure this out for themselves (perhaps by having the student compare answers with other students and discuss any inconsistencies, or by having the CA / TF refer the student back to specific course material).
- Step #3 - CAs / TFs should help the student figure out how to correct their error, through some method such as: Socratic questioning, student exploration of class materials, peer discussion, or explanation by the CA / TF.

- If the CA / TF is directly involved in this step, the way in which they do so becomes an issue of both effective learning and of fairness: Should the explanation use the actual problem, a similar problem, or a more abstract version of the concept at play?
- If you think it is effective for CAs / TFs to use example problems to teach the concept before having the student then apply the concept to the actual problem, it would be very helpful to assist your CAs / TFs in locating (or creating) these relevant examples.
- If needed, return to step #1 - If there are still steps of the problem to complete, the CA / TF should again ask the student to think about how to proceed, perhaps letting them think about it on their own for some time before asking them to discuss their thinking. This could kick off another round of steps #1-3 in terms of CA / TF involvement, although again the difficult question arises as to where the stopping point is in terms of CA / TF assistance.

## **Appendix F: Grading by CAs and TFs**

The official HKS policy on grading in regards to TFs and CAs is found on page 22 of the CA / TF Handbook. (Available a little more than half-way down the page, right above the Dean's Award for Teaching: <http://www.hks.harvard.edu/degrees/teaching-courses/catf>.)

The policy states:

“CAs and TFs do not have instructional appointments and are not authorized by the School to assign grades. Responsibility for grading rests solely with the listed instructor of the course. In some cases Course Assistants and Teaching Fellows may be used to *assist* in gathering information on which grading will be based. However, the final and sole responsibility for each grade rests with the instructor in charge of the course.

The instances in which CAs and TFs may grade generally fall into the following categories:

- Daily problem sets where faculty provide explicit answer sheets are provided by the faculty.
- Assignments where the evaluation is in terms of check, check plus or check minus, etc.
- Assignments where what counts toward the students' overall grade is only whether or not they turned in the assignment, not the grade the assignment receives. In these instances the grade is only intended to provide feedback to the student.

Faculty must be solely responsible for grades in any instance where grade credit is given for the logic used in arriving at an answer, or where there is a qualitative judgment made about the student's work.

For assignments that are not quantitative (essays, memos, papers), CAs or TFs may assist faculty by doing a “first read,” sorting the work broadly according to quality.

It is helpful to the professor if, when reading written work, the CA or TF provides notes for him/her on a separate sheet of paper attached to the student's work.”

## **Appendix G: Institutional Supports for Students**

### **1) Students in Distress:**

- “CAs and TFs concerned about a student should convey their concerns to the faculty member who will contact the appropriate Degree Program Director. We would prefer you to call even if you are unsure that there is a problem because others may have expressed concern about the same individual” (Pg. 46 of the *CA / TF Handbook*).
- Page 46 of the *CA / TF Handbook* lists academic, physical, and psychological indicators of distress.

### **2) Students Struggling with Communication Skills:**

- The HKS Communication Program helps Kennedy School students improve their ability to communicate orally and in writing through workshops, special events, and one-on-one consultations by appointment.
  - See <http://www.HKS.harvard.edu/comprg>, or page 54 of the *CA / TF Handbook* for more details.
- Page 55 of the *CA / TF Handbook* lists several useful online writing resources.

### **3) Students Struggling with English:**

- The HKS Communications Program, although not designed to as an ESL program, will offer occasional help with specific language problems, given available resources.
- Harvard’s Bureau of Study Counsel offers one-on-one ESL peer consultation to help with speaking, listening and presentation skills.
- The Cambridge Center for Adult Education on Brattle Street offers short, intense ESL courses.
- See pages 54-55 of the *CA / TF Handbook* for more details.

### **4) Students Struggling with Common Quantitative Courses:**

HKS students can seek one-on-one academic tutoring at the Bureau of Study Council (BSC). The tutors are undergraduates who have demonstrated an advanced understanding of a given discipline. Historically, by far the most common use of the BSC by HKS students has been for a variety of API courses. Tutoring costs \$14 per hour.